

Name: _____

Date: _____ Period: _____

PRACTICE TEST

Are the two events dependent or independent? Explain.

Roll a red and a blue number cube.

Randomly select a green sock and then another green sock from a drawer when you are getting ready of school.

The community council wants to survey the students to find out what theme they want for the upcoming dance. Answer the following questions in as much detail as possible.

Population

Sample

What question should the community council ask on a survey to find the best results? Explain your reasoning.

How should we pick the students? Conduct a simple random sample. Explain how it is a SRS.

Which of the three scenarios would be considered a biased sample? WHY?

A. A random sample of students at a middle school shows that 10 students prefer listening to rock, 15 students prefer listening to hip-hop, and 25 students prefer listening to no music while they exercise. It is concluded that half the students prefer no music while exercising.

B. Every tenth person who walks into a department store is surveyed to determine his or her music preference. Out of 150 customers, 70 stated they prefer rock music. The manager concludes that about half the customers prefer rock music.

C. The customers of a music store are surveyed to determine their favorite leisure time activity. The results show that 85% of people like to listen to music in their leisure time.

Draw a double stem-and-leaf plot for the data.

Unit 7 Test scores: 28, 45, 41, 40, 45, 50, 33, 27, 35, 33, 46

Unit 8 Test scores: 45, 43, 39, 40, 50, 36, 44, 42, 21, 51, 49

If the first test needed to have an average of 40, what does the next test need to have a score of?

Which measure of central tendency best describes the data? Explain.

Complete the chart below for the data you used to complete a back to back stem-and-leaf plot.

Unit 7 order from least to greatest: _____

Unit 8 order from least to greatest: _____

	Unit 7	Unit 8
Minimum		
Lower Quartile		
Median		
Upper Quartile		
Maximum		

Box-and-Whisker Plot

Create three questions to ask someone to analyze your box and whisker plot. They can be open-ended, multiple choice, or fill-in the blank.

1)

2)

3)

Situation: How many ping-pong balls would fit in a 747-Boeing airplane? A 747 is a Boeing airplane that has a passenger volume 876 cubic meters and a cargo volume of about 159 cubic meters, for a total of 1035 cubic meters. Given a shoebox and ping-pong balls, how would you figure out how many ping-pong balls fit inside a 747-Boeing airplane?



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